STUDIES OF NEOTROPICAL COMPOSITAE–II. A NEW COMBINATION IN CHROMOLAENA (EUPATORIEAE) John F. Pruski Missouri Botanical Garden P.O. Box 299 St. Louis, Missouri 63166-0299, U.S.A.

ABSTRACT

The new combination **Chromolaena clematitis** is made for a South American species.

RESUMEN

Se presenta la nueva combinación de **Chromolaena clematitis** para una especie Sudamericana.

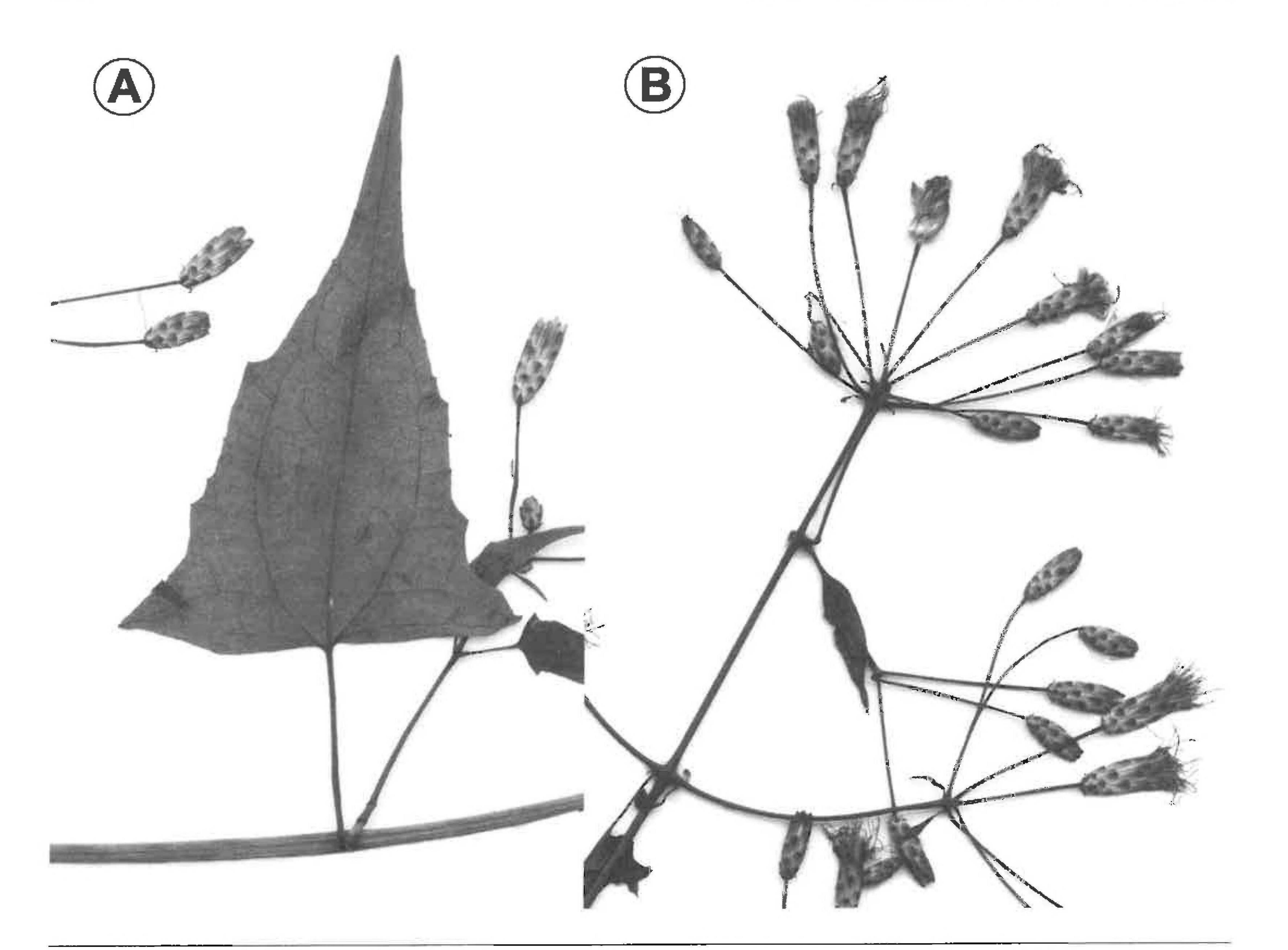
Most species of *Chromolaena* DC. (Compositae: Eupatorieae: Praxelinae) have been treated historically as members of *Eupatorium* sect. *Cylindrocephala* (e.g., Robinson 1918, 1919). *Chromolaena*, as summarized by King and Robinson (1987), however, differs from *Eupatorium* L. by glabrous (vs. setulose) style bases, distinct (vs. indistinct) carpopodia, and cylindrical involucres of deciduous (vs. persistent) phyllaries. *Chromolaena* differs from remaining genera of Praxelinae by subequal corolla lobes, receptacles that are usually flat on top, long pappus bristles, and style branches that are cylindrical and never clavate (King & Robinson 1987). In a revision of Peruvian Eupatoriums, B.L. Robinson (1919) recognized the distinctive *Eupatorium clematitis* DC. (see Fig. 1), whereas King and Robinson (1987) and Robinson and Holmes (2008) list it in synonymy of *C. odorata* (L.) R.M. King & H. Rob. *Eupatorium clematitis* was not listed as occurring in Ecuador by Robinson (1918). *Chromolaena odorata* is common and widespread throughout much of the neotropics, and is known also as an introduced weed in the paleotropics (King & Robinson 1987; Pruski 1997). My treatment of Compositae for the Río Cenepa region of northern Peru recognizes *C. clematitis* as endemic to Ecuador and Peru, where it occurs in low foothills of the eastern Andes. The purposes of this paper are to provide a new combination for this species and a description of it for use as an aid in identifications.

Chromolaena clematitis (DC.) Pruski, comb. nov. (Fig. 2). BASIONYM: Eupatorium clematitis DC., Prodr. 5:144. 1836. Osmia clematitis (DC.) Sch. Bip., Jahresber. Pollichia 22–24:252. 1866. Type: "Peruvia?," 1834 [sic], Poeppig 3108 (HOLOTYPE: G-DC [photograph sub F neg. 8150 in MO, US; IDC microfiche 800. 803.III.6]; ISOTYPES: F, W).

Perennial herbs to vining shrubs, 0.7–2 m tall; stems few-branched distally, subterete, puberulent to glabrate. Leaves simple, opposite, long-petiolate; petiole 0.8–3 cm long, slender, puberulent; blade deltate to hastate, 2–7 cm long, 0.6–5.5 cm wide, chartaceous to thinly so, 3-veined from base, base hastate to truncate, margins entire to few-serrulate, apex long-acuminate to attenuate, adaxial surface puberulent along veins to glabrous, abaxial surface densely red-glandular, otherwise puberulent to glabrous, the non-glandular trichomes very short. Capitulescence terminal, open, thyrsoid-paniculate with ultimate branches umbelliform to corymbiform, 2–21-headed, to 15–20 cm tall, ca. 15 cm wide. Capitula discoid, 23–26-flowered, 9.5–12.5 mm high, 2.8–3.5 mm wide; involucre cylindrical, 9–11.5 mm long, corollas slightly exserted; phyllaries imbricate, graduated, 5–7-seriate, tightly appressed, deciduous in fruit, scarious with apex subherbaceous, generally 3-nerved, most or at least the mid-series phyllaries truncate-mucronate apically, glabrous to outer series sparsely puberulent distally, outer ones elliptic-lanceolate to ovate, 1–2 mm long, 1–2 mm wide, grading into inner ones, these lanceolate, 9–11.5 mm long, 1–1.5 mm wide; receptacle epaleate, shortly clavate but flat on top, ca. 1.6 mm tall and wide, glabrous; peduncle 1–2.5 cm long, striate, often 1- or 2-bracteolate, puberulent, main capitulescence stalk to 6 cm long. Florets bisexual; corolla white, funnelform, 4.8–5.7 mm long, glabrous, lobes subequal, ca. 0.5 mm long, erect to slightly spreading; anthers included; style

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Fig. 1. Chromolaena clematitis (DC.) Pruski. A. Leaf showing hastate base (Palacios 12395, MO). B. Capitulescence showing ultimate branches umbelliform with long-pedunculate capitula. (Rueda et al. 1043, MO).

base glabrous, branches cylindrical, greatly exserted from corolla, 3–4 mm long, the proximal half of each branch with paired ventro-marginal stigmatic lines, the distal half with minutely papillose sterile appendage with an acute to obtuse apex. Cypselae narrowly obconical, brown with tan angles, 3–3.6 mm long, 3–4-angled, glabrous; carpopodium distinct, tan, circular; pappus bristles many, elongate, stramineous, ca. 5.5 mm long.

Additional specimens examined: **ECUADOR. Napo**: Estación Biológica Jatun Sacha, Río Napo, 8 km al E de Misahuallí, bosque muy húmedo tropical, potrero a 200 m al sur de la reserva, 1°04'S, 77°36'W, 450 m, 23–27 Jun 1987, *Cerón 1678* (MO); Tena Cantón, Aliahui, bosque húmedo tropical, area degradada en viejo pastizal, 450 m, 1°04'S, 77°36'W, Jul 1994, *Palacios 12395* (MO); Tena Cantón, Estación Biológica Jatun Sacha, sendero 1 y 3, 1°04'S, 77°36'W, 380 m, 9 Aug 1992, *Rueda et al. 1043* (MO). **PERU. Amazonas:** Bagua Prov., Yamayakat, bosque secundario, 4°55'S, 78°19'W, 350 m, 10 Jun 1995, *Vasquez et al. 20117* (MO). **San Martín:** Mariscal Caceres, Tocache Nuevo, Puerto Pizana, márgen derecha del río Huallaga, 350–400 m, 22 Jun 1974, *Schunke V. 6995* (MO).

Distribution and ecology.—Chromolaena clematitis is known to flower from June to August at elevations between 350–450 meters in the eastern Andean foothills of Ecuador and Peru from about 1–8° south latitude.

Chromolaena clematitis is known only from a few collections in northern Peru and eastern Ecuador, from where the type was presumably collected. By *gestalt* and reddish sessile glands of the abaxial leaf surfaces, *C. clematitis* is similar to *C. odorata*, under which it was synonymized by King and Robinson (1987) and Robinson and Holmes (2008). *Chromolaena clematitis* is recognized easily, however, by its leaves with hastate to truncate bases and capitulescences with ultimate branches of long-pedunculate typically umbelliform capitula. Although across its broad range in both hemispheres *C. odorata* is somewhat variable in shape and pubescence of leaves and phyllaries, its variation is minor and continuous, while *C. clematitis* remains

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Fig. 2. Photograph of the holotype (*Poeppig 3108*, G-DC) of *Eupatorium clematitis* DC.

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consistently distinctive. *Chromolaena clematitis* differs from *C. odorata* by basally hastate to truncate (vs. attenuate to subtruncate) leaves with blades glandular, otherwise puberulent to glabrous (vs. glandular and pubescent) abaxially, by ultimate branches of the capitulescences with long (vs. short)-pedunculate typically umbelliform (vs. corymbiform) capitula, and by most or at least the mid-series phyllaries with truncate-mucronate (vs. acute to rounded) apices.

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